

**AT-GRADE SEWAGE DISPOSAL SYSTEM  
INSPECTION CHECKLIST**

**Inspector's Name:** \_\_\_\_\_

**I. PRECONSTRUCTION MEETING AND SITE PREPARATION**

**Date:** \_\_\_\_\_

- A. MDE Certified At-Grade Installer Name \_\_\_\_\_
- B. MDE Certified At-Grade installer present for entire construction? Yes \_\_\_\_\_ No \_\_\_\_\_
- C. Mound and gravel bed properly staked out on contour (field verified) \_\_\_\_\_
- D. No compaction by heavy equipment:
  - 1. Within mound perimeter \_\_\_\_\_
  - 2. Downslope from mound by 25 feet \_\_\_\_\_
  - 3. Within sewage disposal area \_\_\_\_\_
- E. Vegetation cut and properly removed \_\_\_\_\_
- F. Trees, if present, cut off at ground level and stumps left in place \_\_\_\_\_
- G. Soil moisture level low enough to permit construction and soils are not frozen \_\_\_\_\_
- H. Soil plowed or scarified within mound perimeter, on contour, and to suitable depth \_\_\_\_\_
- I. Location of BAT unit(s)/septic tank(s) and pump chamber properly staked out and in suitable locations \_\_\_\_\_

**II. CONSTRUCTION**

**Date:** \_\_\_\_\_

**A. BAT Units and/or Septic Tanks**

- 1. Total number of tanks \_\_\_\_\_
- 2. Tank type and construction meets specifications (i.e. top-seam, baffled, etc.) \_\_\_\_\_
- 3. Capacity requirements met \_\_\_\_\_
- 4. Proper installation (bedded, level, proper orientation, etc.) \_\_\_\_\_
- 5. Inlet and outlet pipes at proper elevations and water tight connections \_\_\_\_\_
- 6. Baffles properly installed (if required) \_\_\_\_\_
- 7. Effluent screen/filter properly installed \_\_\_\_\_
- 8. Tank joints/seams above seasonal high water table \_\_\_\_\_
- 9. Tank water tightness checked
  - a. Certified by supplier (attach documentation) \_\_\_\_\_
  - b. Weep holes in tank walls/bottom sealed if present \_\_\_\_\_
  - b. 24-hour field leakage test conducted \_\_\_\_\_
  - c. Proper vacuum test conducted \_\_\_\_\_
  - d. Riser to tank lids watertight and 6 inches above finished grade \_\_\_\_\_

**B. Pump Chamber**

- 1. Dimensions meet specifications \_\_\_\_\_
- 2. Six-inch block present under pump \_\_\_\_\_
- 3. Control panel and alarm installed properly \_\_\_\_\_
- 4. Control panel and alarm meet specifications \_\_\_\_\_
- 5. Event counter/elapsed time meter/flow meter installed  
(if required) \_\_\_\_\_
- 6. Proper float elevations (on/off/alarm) \_\_\_\_\_
- 7. Check valve/ quick disconnect/siphon or weep hole present \_\_\_\_\_
- 8. Proper elevation of influent pipe verified \_\_\_\_\_
- 9. Pies through tank walls make watertight seal \_\_\_\_\_
- 10. Valves meet specifications if applicable (gate valve, etc.) \_\_\_\_\_
- 11. Tank joints/seams above seasonal high water table \_\_\_\_\_
- 12. Manhole access and risers 6 inches above finished grade \_\_\_\_\_
- 13. Average day's design flow storage capacity above alarm \_\_\_\_\_
- 14. Force main diameter as specified on design \_\_\_\_\_
- 15. High water alarm on separate circuit than pump \_\_\_\_\_
- 16. Manhole rises to tank lid watertight \_\_\_\_\_

**C. Absorption Area**

- 1. Gravel meets size and type specifications \_\_\_\_\_
- 2. Gravel is clean \_\_\_\_\_
- 3. Gravel brought to proper elevation prior to placement of laterals \_\_\_\_\_
- 4. Gravel covers entire bed area \_\_\_\_\_
- 5. Absorption bed at the proper dimensions \_\_\_\_\_
- 6. Gravel absorption bed toe level \_\_\_\_\_
- 7. Minimum of 6 inches of suitable gravel under distribution lateral  
and along effective bed width \_\_\_\_\_

**D. Distribution System**

- 1. Pressure rated pipes and fittings used \_\_\_\_\_
- 2. Fitting adequately bonded \_\_\_\_\_
- 3. Proper diameter of lateral piping \_\_\_\_\_
- 4. Proper diameter of lateral perforations \_\_\_\_\_
- 5. Proper spacing of lateral perforations \_\_\_\_\_
- 6. Perforations oriented downward \_\_\_\_\_
- 7. End perforation suitable and protected \_\_\_\_\_
- 8. Two-inches of gravel (minimum) to cover laterals \_\_\_\_\_
- 9. Distribution system pressure-checked \_\_\_\_\_

**E. Final Placement of Fill and Topsoil**

- 1. Spun Geotextile fabric covers entire gravel bed \_\_\_\_\_
- 2. Tapered topsoil cap present: \_\_\_\_\_
  - a. 12 inches minimum depth \_\_\_\_\_
  - b. Extends minimum 5 feet beyond edges of gravel bed \_\_\_\_\_
- 3. Topsoil cover: \_\_\_\_\_
  - a. Acceptable quality \_\_\_\_\_
  - b. Present and graded \_\_\_\_\_
  - c. Seeded/straw/sod \_\_\_\_\_
  - d. Mulched, if applicable \_\_\_\_\_
- 4. Sides no steeper than 3:1 slope \_\_\_\_\_

**F. Monitoring Appurtenances**

- 1. Observation ports/pipes: \_\_\_\_\_
  - a. Proper diameter, location, and number \_\_\_\_\_
  - b. Installed to proper depth \_\_\_\_\_
  - c. Properly anchored and secured \_\_\_\_\_
- 2. Lateral turn-ups on all laterals and sleeved in larger diameter 4 inch pipes or turf boxes \_\_\_\_\_

**G. Site Drainage and Proper Grading (if required)**

- 1. Surface water diversion properly installed \_\_\_\_\_
- 2. Curtain drain properly installed \_\_\_\_\_
- 3. Vertical drain \_\_\_\_\_

**III. PUMPING SYSTEM TEST**

**Date:** \_\_\_\_\_

- A. Pump-on switch is operational \_\_\_\_\_
- B. Pump-off switch is operational \_\_\_\_\_
- C. Timers set (if applicable) \_\_\_\_\_
- D. High level alarm switch is operational \_\_\_\_\_
- E. High level alarm on dedicated circuit \_\_\_\_\_
- F. Volume of drawdown corresponds with specified dose \_\_\_\_\_
- G. System achieves specified pressure \_\_\_\_\_

**IV. Comments and As Built Drawing:**